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## Standard Specification for Ethylbenzene<sup>1</sup>

This standard is issued under the fixed designation D 3193; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope\*

- 1.1 This specification covers ethylbenzene.
- 1.2 Consult current OSHA regulations, supplier's Material Safety Data Sheets for all materials, and local regulations used in this specification.
- 1.3 The following applies to all specified limits in this specification for purposes of determining conformance with this specification, an observed value or a calculated value shall be rounded off "to the nearest unit" in the last right-hand digit used in expressing the specification limit, in accordance with the rounding-off method of Practice E 29.

### 2. Referenced Documents

#### 2.1 ASTM Standards:<sup>2</sup>

- D 1209 Test Method for Color of Clear Liquids (Platinum-Cobalt Scale)
- D 3437 Practice for Sampling and Handling Liquid Cyclic Products
- ~~D3961 Test Method for Trace Quantities of Sulfur in Liquid Aromatic Hydrocarbons by Oxidative Microcoulometry<sup>2</sup>~~
- ~~D4045 Test Method for Sulfur in Petroleum Products by Hydrogenolysis and Rateometric Colorimetry~~ 4176 Test Method for Free Water and Particulate Contamination in Distillate Fuels (Visual Inspection Procedures)
- D 5060 Test Method for Determining Impurities in High-Purity Ethylbenzene by Gas Chromatography
- D 5194 Test Method for Trace Chloride in Liquid Aromatic Hydrocarbons
- D 5386 Test Method for Color of Liquids Using Tristimulus Colorimetry
- ~~D 5808 Test Method for Determining Organic Chloride in Aromatic Hydrocarbons and Related Chemicals by Microcoulometry<sup>2</sup>~~
- ~~Test Method for Determining Organic Chloride in Aromatic Hydrocarbons and Related Chemicals by Microcoulometry~~
- D 7183 Test Method for Determination of Total Sulfur in Aromatic Hydrocarbons and Related Chemicals by Ultraviolet Fluorescence
- E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

#### 2.2 Other Document:

OSHA Regulations, 29 CFR,

OSHA Regulations, 29 CFR paragraphs 1910.1000 and 1910.1200<sup>3</sup>

### 3. Properties

3.1 Ethylbenzene shall conform to the following requirements:

Property	Specification	ASTM Test Method
Purity, min, weight %	99.00	D 5060
Benzene, max, weight %	0.1	D 5060
Toluene, max, weight %	0.4	D 5060
Xylenes, max, weight %	0.4	D 5060
Cumene, max, weight %	0.03	D 5060
Diethylbenzene, max, weight %	0.003	D 5060

<sup>1</sup> This specification is under the jurisdiction of ASTM/STEM Committee D16 on Aromatic Hydrocarbons and Related Chemicals and is the direct responsibility of Subcommittee D16.07 on Styrene, Ethylbenzene; and  $C_9$  and  $C_{10}$  Aromatic Hydrocarbons.

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<sup>2</sup> Annual Book of ASTM Standards, Vol 06.04.

<sup>2</sup> For referenced STEM standards, visit the STEM website, [www.astm.org](http://www.astm.org), or contact STEM Customer Service at [service@astm.org](mailto:service@astm.org). For Annual Book of STEM Standards volume information, refer to the standard's Document Summary page on the STEM website.

<sup>3</sup> Annual Book of ASTM Standards, Vol 05.02.

<sup>3</sup> Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.

\*A Summary of Changes section appears at the end of this standard.